

**Ontario Energy
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BY E-MAIL

January 03, 2013

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto ON M4P 1E4

Dear Ms. Walli:

**Re: Dufferin Wind Power Inc._ Leave to Construct Application
Board File Number EB-2012-0365**

Pursuant to Procedural Order No. 2 issued on December 14, 2012, please find attached the Board Staff interrogatories on the leave to construct application filed by Dufferin Wind Power Inc.

Yours truly,

Original Signed By

Leila Azañez
Advisor, Electricity Facilities and Infrastructure



Dufferin Wind Power Inc.

EB-2012-0365

January 03, 2013

Note 1:

Dufferin Wind Power Inc. is referred to as “DWPI” or the “Applicant” in this document.

Note 2:

Board staff request that DWPI seek the assistance, as and when appropriate, from other parties in order to provide complete and accurate responses, including, but not limited to:

- The Ontario Power Authority (“OPA”)
- Hydro One Networks Inc. (“HONI”);
- The Independent Electricity System Operator (“IESO”); Local Distribution Companies

Note 3:

Where the Applicant deems that answers may contain information of confidential nature, such material may be filed in accordance with the Board’s *Practice Direction on Confidential Filings*.

Bd. Staff Interrogatory 1: Need for the Project**Reference:**

- a. Letter from the Applicant dated October 29, 2012/ FIT Contract Assumption and Acknowledgment Agreement¹
- b. Exh. B/Tab 1/ Sch. 1/ p.5-6/ §17
- c. OPA Notice to Proceed
- d. Exh. B/Tab 3/ Sch. 1/Need for the Project

Preamble:

Reference (a) confirms contract assignment of the Feed-In-Tariff ("FIT") contract from Farm Owned Power (Melancthon) Ltd. ("FOP") to the newly incorporated DWPI.

Reference (b) discusses the necessary licenses required to channel the FIT contracted capacity once the transmission line is energized. In particular, it highlights that:

Although the proposed Transmission Project will enable the Applicant to transmit electricity, by application of Ontario Regulation 161/99 under the Act, the Applicant is exempt from the requirement under Section 57(b) of the Act to obtain a licence to own or operate transmission facilities. This is because the Applicant will not charge a price for transmitting electricity and the Applicant will be a transmitter that is also a generator that transmits electricity only for the purpose of conveying it to the IESO-controlled grid.

The Applicant does intend to apply for a generator licence in respect of the Wind Farm in due course.

With respect to the need for the project, reference (c) deals with the fact that until the OPA issues a Notice to Proceed to the FIT generator, the OPA may terminate the power purchase agreement at its discretion by notice to the FIT generator.

¹ Filed in confidence

Reference (d) indicates that the DWPI's windfarm will generate 99.1MW of renewable nameplate capacity and that the Transmission Project is needed to connect the windfarm to the IESO-controlled grid.

Question/Request:

- i. Please confirm that the assignment of the FIT contract did not result in any contractual change. If there are some alterations to the original contract please indicate what they are.
- ii. Please file the FIT contract applicable to this project.
- iii. With respect to reference (c), please indicate when DWPI expects to receive the OPA Notice to Proceed.
- iv. Please indicate when the Applicant intends to apply for a generation licence.

Bd. Staff Interrogatory 2: Permits and Project Schedule

Reference:

- a. Exh. E/Tab 2/ Sch. 1/ p.5/Table 1 - Potentially Applicable Permits, Approvals and Authorizations
- b. Exh. B/Tab 1/ Sch. 1/ p.6/ §18
- c. Filing Requirements for Transmission and Distribution Applications/ Chapter 4/p.14/Project Planning²
- d. Exh. C/Tab 1/ Sch. 1/Connection and In-Service Schedule

Preamble:

A table of potentially required permits and governmental approvals for the transmission project and the wind farm is provided at reference (a), but this table does not include any timeline.

With respect to project planning, reference (b) indicates in part that:

The Applicant plans to commence construction of the Project Substation and the

² May 17, 2012 version

Switching Station in Spring 2013. [...] The Wind Farm is expected to go into service by December 31, 2013. In keeping with this project schedule, the Applicant requests that this Application be handled by the Board on an expedited basis, having regard to the need for appropriate timeframes for notice and intervenor participation.

Reference (c) points to the need to provide the Board with time estimates for construction and service dates, including but not limited to the critical path and time frame for the completion of construction and operational start-up of the proposed facilities.

Reference (d) discusses the project schedule but does not provide a construction plan outlining the various project construction phases.

Question/Request:

- i. With respect to reference (a), please provide an updated table indicating the current status and the timeline for obtaining each permit and approval.
- ii. If applicable, specify which permits/approvals are necessary prior to the commencement of construction of transmission facilities and whether any of the permits/approvals are interdependent.
- iii. Regarding reference (b), based on the OPA contractual terms, when is the contracted capacity required to reach the market? Is there any flexibility in this projected date?
- iv. In line with reference (c), if delays in obtaining some of these permits/approvals are foreseen, please discuss the impact of these delays (if any) on the project schedule, and impact on the OPA contract terms (if any).
- v. Please file a Gantt chart in connection with the transmission facilities.

Bd. Staff Interrogatory 3: General Organizational Capability

Reference:

- a. Exh. B/Tab 1/ Sch. 1/ p.5-6/ §17

b. OPA Notice to Proceed Prerequisites

Preamble:

Board staff note that neither shareholder, Longyuan Canada Renewables Ltd. ("Longyuan Canada") or Farm Owned Power (Melancthon) Ltd., are presently licensed generators or transmitters in Ontario.

Reference (a) highlights that DWPI is not yet a licensed generator in Ontario, and as such has not filed with the Board any historical background information on its ability to perform to the requisite standards.

The OPA Notice to Proceed Prerequisites contain documentation that may be helpful to the Board to determine the operational strength of the applicant.

Question/Request:

- i. What is the Applicant's experience in constructing and operating a transmission infrastructure in Ontario or in other jurisdictions in Canada?
- ii. Please indicate what corporate organizational capabilities exist to complete the applied for transmission facilities. Where applicable, please provide information about experience with respect to:
 - o Project Management;
 - o Design;
 - o Construction;
 - o Operation and Maintenance; and
 - o Examples of similar projects that have been undertaken.
- iii. Please indicate what human resources will be pooled, from either the minority or majority shareholder, and dedicated to this project?
- iv. Please provide the CVs of all key project personnel involved in the transmission project.
- v. Please file a chart to illustrate the organizational structure that DWPI intends to utilize for this project

Bd. Staff Interrogatory 4: Project Management**Reference:**

- a. Exh. E/Tab 1/ Sch. 1/Operational Details

Preamble:

With regard to reliability, the applicant notes at the reference that it might establish a remote management and monitoring capability with qualified staff to serve as a back-up to on-site operations for additional safety and reliability.

With respect to communication, DWPI indicates that it intends to:

...establish and [sic] emergency response plan that includes notification requirements and protocols to ensure local municipalities, first responders and the public are kept informed during emergency situations involving the Wind Farm and the Transmission Project.

The reference also indicates that several contractors could be retained. More specifically:

- As to operation and maintenance, the reference indicates in part that:
It is anticipated that the Applicant will enter into an operations and maintenance agreement with a qualified third party operator [...]. The third party operator will provide the full complement of personnel required to operate the Wind Farm, including up to 15 full and part time employees who will carry out all operations, maintenance, monitoring and control functions related to the Wind Farm on a 24/7 basis.
The third party operator will be required to provide operators that are available 24/7 to respond to requests from the IESO or Hydro One's Ontario Grid Control Centre ("OGCC") [...]. Staff performing such switching operations in response to these instructions will need to have completed Ontario's "Work Protection Control Training".
- As to specialized transmission operation and maintenance, DWPI at the reference indicates in part that:
While the third party operator's focus is expected to be on the operation of the Wind Farm itself, it is anticipated that the Applicant will retain the services of a separate third party to provide specialized operations and maintenance services in

respect of the Transmission Project. Such third party would be expected to provide services that include, among other things, periodic inspections of the Transmission Line and stations, vegetation management and maintenance activities consistent with good utility practices.

Question/Request:

- i. For the various activities mentioned at the reference, how many contractors will be retained in total? Please tabulate the various functions covered by these third parties for construction, operations and maintenance activities.
- ii. Please file a human resource plan and an organizational chart to illustrate the transmission project organizational structure, and where applicable please distinguish between contracted and project personnel.
- iii. With respect to contractors:
 - o Are any of the contractors affiliates of Longyuan Canada?;
 - o Has contractor selection for the activities mentioned at the reference started? If so, please identify what the capabilities of any contractors are or would be; and
 - o Please provide a summary of the experience of each contractor and examples of similar projects they have undertaken.
- iv. If contractor selection has not started, please update the Board on when this will take place and acknowledge that info may be requested in the future in relation to this.
- v. Please confirm that DWPI will retain ultimate responsibility and accountability for the quality and the reliability of the electricity service provided by the Transmission Project?
- vi. With respect to the referenced “emergency response plan”, please map out the role and responsibilities of the various contractors within this emergency response plan, if any.

Bd. Staff Interrogatory 5: Industry Standards and Codes

Reference:

- a. Exh. D/ Tab 1/ Sch. 1/ §2/ Proposed Transmission Project

- b. Exh. E/ Tab 2/ Sch. 1/ §1/ Codes and Standards
- c. Exh. B/ Tab 2/ Sch. 5/ Drawings and Illustrations/ Fig. 4(a) to 4(n)/ Design Notes
- d. Exh. D/ Tab 1/ Sch. 1/p.5-6/ Accommodating Potential Railway Redevelopment

Preamble:

At reference (a), the proposed Transmission Project elements and their design are described.

With respect to technical and safety specifications and standards, reference (b) generally notes that the proposed transmission facilities would meet the requirements of the Canadian Standard Association for all four elements of the Transmission Project.

In addition the various maps at reference (c) display some specific design specifications, but do not indicate the general standard and/or applicable code retained. (ie. *TSC, the Ontario Electric Safety Code (2009), the IESO Market Rules, etc...*).

With respect to the rail infrastructure co-location, reference (d) indicates in part that:

Recognizing this interest in developing a potential future rail line in the Rail Corridor, the Applicant has designed the Transmission Project so as to facilitate the potential future co-location of a rail line within the Rail Corridor. As noted, the design of the Transmission Line includes reduced pole spacing along the Rail Corridor to ensure appropriate clearances so as to accommodate potential co-location with a future railway line. Also notable is that the Transmission Line would run along one side of the Rail Corridor so as to leave room within the Rail Corridor for a potential future rail line, while at the same time ensuring that the setbacks from the Transmission Line to the edge of the Rail Corridor and to the potential location of the rails would meet all applicable safety standards.

Question/Request:

- i. Please indicate whether the transmission line will share any right-of-way with distribution or other transmission lines.

- ii. Please indicate the nature (e.g. underground cable, water pipes, railway lines, etc...) of any other existing facilities in the right-of-way which might affect construction.
- iii. If applicable, please identify proposed approaches to mitigate possible disruption to such facilities.
- iv. Please indicate the design and construction standards and procedures, relating to proximity and effects such as induction, which will protect pre-existing facilities and personnel from direct and induced currents and voltages. Include in your discussion corrosion protection, cable location identification, and grounding for safety and “tingle” or “stray” voltage.
- v. Please provide a consolidated summary of the various design specifications embedded in the maps at reference (c) and please indicate the relevant applicable standards.
- vi. Considering the recent developments regarding the Mega-quarry project, please discuss whether elements of design noted at reference (d) are still valid and indicate whether the mentioned added safety and/or reliability designs are retained.

Bd. Staff Interrogatory 6: Alternatives Considered

Reference:

- a. Exh. D/ Tab 1/ Sch. 1/p.5/ Underground Segments
- b. Various Letters of Comment³ filed with the Board
- c. Exh. D/ Tab 1/ Sch. 1/p.5-6/ Accommodating Potential Railway Redevelopment

³ **Letters from:** the Township of Melancthon (26-11-2012) , H. J. Lyon (23-11-2012), Roy Thomas (4-11-2012), John Maguire (26-11, 2012), Kathleen Kurtin (26-11-2012), Town of Sheburne (21-11-2012), Bill Little (12-11-2012), Township of Amaranth (11-11-2012)

Preamble:

Reference (a) indicates that approximately 2.3 km of the transmission line, divided in four segments, will be underground, and will be constructed by means of trenching or horizontal directional drilling.

Reference (b) refers to the various letters of comment filed with the Board in connection with this project that have raised the option of burying the transmission line in its entirety.

Reference (c) points to some design selection stemming from co-location with a potential railway.

Question/Request:

- i. What is the cost per km of the proposed overhead vs. underground transmission line?
- ii. How much weight has been given to the co-location factor in the overall assessment criteria of possible alternatives? Briefly explain.

Bd. Staff Interrogatory 7: The 69 kV Alternative**Reference:**

- a. Exh. B/Tab 4/ Sch. 1/ Transmission Alternatives Considered
- b. Exh. H/Tab 2/ Sch. 2/ Appendix B/ Initial System Impact Assessment
- c. Exh. H/Tab 3/ Sch. 1/ Customer Impact Assessment

Preamble:

DWPI describes in qualitative terms, at reference (a) the reasons why the current Transmission Project option was retained over an earlier 69kV alternative.

The 69kV alternative was apparently a viable project from a technical standpoint as the initial SIA and CIA suggest.

Question/Request:

- i. What were the main reasons for abandoning the 69 kV alternative? Were the reasons mainly environmental, land related, cost related or were there other considerations?
- ii. Please file a comparative project analysis of the two options (69 kV vs. proposed project) that includes:
 - o All relevant comparison criteria;
 - o All comparative costs and benefits;
 - o If dollar values are attached to attributes that are typically not monetized, please indicate which ones they are and how the dollars values are derived;
 - o Financial indicators (cost of capital, project's internal rate of return, etc...). Please include the relevant assumptions.

Bd. Staff Interrogatory 8: Connecting Other Generation**Reference:**

- a. Exh. B/Tab 1/ Sch. 1/ p.5-6/ §17

Preamble:

At reference (a), the Applicant asserts that it is exempt from the requirement to obtain a transmitter's license pursuant to Section 57(b) of the OEB Act.

Board staff note that the Dufferin Wind Project is in a "wind rich" part of the province, and as such one could see other renewable generation project materialize in this area. Synergies may exist for electricity infrastructure amongst various existing and future projects.

Board staff also note that transmission infrastructure is inherently a natural monopoly in the areas where it is sited. Board staff further understand that the proposed infrastructure, including the 47 km long transmission line, will be wholly

owned by DWPI and located in areas where other renewable generation or other facilities could be sited, and that may wish to connect to the line.

Question/Request:

- i. Please indicate the rating of the transmission line.
- ii. As a privately owned transmission line, does DWPI see the possibility of accommodating additional connections?
- iii. On what basis would DWPI expect to entertain such connection requests and, where appropriate, facilitate such connections?
- iv. Keeping with an integrated approach to system planning, would DWPI be open to indicating/publicizing its willingness to entertain additional connections to its transmission line to other entities?
- v. Please file possible steps and DWPI's approach to addressing such connection requests, including but not limited to consultation with the OPA and local utilities, and notification to the Board.

Bd. Staff Interrogatory 9: Stranded Assets and Decommissioning

Reference:

Exh. E/ Tab 2/ Sch. 1/ §2/ Renewable Energy Approval

Preamble:

The Decommissioning Plan Report forms part of the Renewable Energy Approval package discussed at the reference.

The pre-filed evidence gives no indication as to the useful life of the Transmission Project or the Wind Farm.

Question/Request:

- i. Please acknowledge the Applicant's responsibility for removing transmission and related facilities if the Facility construction does not proceed or is

- interrupted due to unforeseen events such as the inability to acquire or secure rights over the necessary lands or a force majeure event?
- ii. Are guarantees in place or funds set aside for this purpose? Please provide details of this funding availability.
 - iii. Please confirm that decommissioning costs are the responsibility of the Applicant.
 - iv. Please file the Decommissioning Plan Report.

Bd. Staff Interrogatory 10: Interconnection Station and Cost Responsibility

Reference:

- a. Exh. D/ Tab 1/ Sch. 1/ p.7/ Interconnection

Preamble:

At the reference, DWPI states that:

The Switching Station will be connected to the 230 kV bus within Hydro One's existing Orangeville TS using a 230 kV Interconnection that is approximately 100 m in length. The connection or ownership demarcation point with Hydro One will be situated 2 m outside of the fence from the Switching Station. The location for revenue metering units will be determined in accordance with IESO requirements set out in Chapters 3, 5 and 6 of the Market Rules, as well as in accordance with requirements set out in the FIT Contract.

Question/Request:

- i. Please confirm that the Applicant is responsible for the total cost of the Interconnection Station.
- ii. Please clarify who will own that Interconnection Station and who will be responsible for its maintenance and security, regardless of the cost responsibility for that Interconnection Station.

Bd. Staff Interrogatory 11: Land Matters**Reference:**

- a. Exh. F/ Tab 2/ Sch.1/ p.1-3/ §1
- b. Exh. F/ Tab 2/ Sch.1/p.4-5/ Temporary Working Rights Required
- c. Exh. F/ Tab 2/ Sch.1/Appendix 1/Landowner Line List
- d. Exh. F/ Tab 2/ Sch.1/
 - Appendix 1 - Form of Lease for Project Substation
 - Appendix 2 - Form of Option to Purchase for Switching Station
 - Appendix 3 - Form of Transmission Easement (for Private Easements)
 - Appendix 4 - Form of Transmission Lease (for Private Lands)
 - Appendix 5 - Form of Wind Turbine and Transmission Lease (for Private Lands)
 - Appendix 6 - Form of Transmission Easement (for Rail Corridor)

Preamble:

Reference (a) indicates that the Applicant is seeking land interests in 90 properties, and that negotiations are underway to acquire these interests. More specifically, DWPI has indicated that it is currently negotiating with the County of Dufferin with respect to various land rights in connection with the Transmission Project.

Reference (b) highlights that there are temporary rights required; however there is no indication as to the numbers of such properties affected, and the filed landowner list does not allow one to distinguish between permanent and temporary rights. In addition language in reference (b) is provisional. At page 4, DWPI states that:

In addition to the land rights required for structures and for the ongoing operation and maintenance of the Transmission Project, certain temporary working rights may be required to allow for construction activities. These include road crossings, drains crossings, construction access and equipment or material laydown areas. To the extent such rights may be required, the Applicant intends to rely upon the temporary construction and working rights that are included within each of the forms of land agreements provided in Exhibit F, Tab 2, Schedule 1.

At page 5 of reference (b) the applicant states that:

In respect of any temporary construction or working rights that may be required, the Applicant will continue to assess its needs to determine whether any additional such rights will be required beyond those which are already

incorporated into the various forms of agreement.

The table at reference (c) indicates the agreement type but not the interest sought by the Applicant.

At reference (d) various forms of agreements, over which DWPI seeks Board approval, have been provided in connection with the different land rights DWPI is seeking.

Question/Request:

- i. Has DWPI offered and/or provided any legal compensation to landowners to cover legal costs for those who wished to have their form of land agreement as filed in reference (d) reviewed by a legal consultant, or counsel? If not, would it be prepared to do so for the acquisition of any outstanding land rights?
- ii. Has DWPI purchased any lands in connection with the Transmission project?
- iii. Please indicate which of the 90 parcels that are listed at reference (c) require temporary or permanent land rights.
- iv. Referring to (b), if access during construction, and at other times such as maintenance, will require additional land rights, please indicate so.
- v. Please provide an update on the status of negotiations with all landowners, including new ones, if any.
- vi. With respect to land matters, please file an updated non-confidential table (keep registered title holder unknown) and indicate the type of interest in land being sought for each of these. Please indicate the status of negotiations and settlements of these easements.

Location (Municipality)	Legal Description of Land	Interest Sought	Status of Negotiations/Settlement

- vii. What is the minimum distance to residential property lines and residential buildings in each stretch of the length of the line?

Bd. Staff Interrogatory 12: Letters of Comment

Reference:

- a. All letters of comment filed with the Board in connection with this proceeding
- b. DWPI Reply to a Letter of Comment of Mr. Roy Thomas dated November 19, 2012

Preamble:

Various letters of comment have been filed with the Board.

Reference (b) points to a copy of one official reply to a letter of comment the Board has received.

Question/Request:

- i. Please provide copies of any additional replies or communications related to the letters of comment strictly related to this application.
- ii. For matters that the applicant feels are clearly outside the scope of this proceeding, has DWPI directed commenters to the appropriate forum, such as the REA process? If so, please file related evidence.

Bd. Staff Interrogatory 13: System Impact Assessment (SIA)

Reference:

- a. Exh. H/Tab 2/ Sch. 2/ Appendix A/ p.4 / SIA Final Addendum Report
- b. Exh. H/Tab 2/Sch. 2/ Appendix B/ p.2-3/ Initial SIA Report

Preamble:

The SIA Final Addendum Report at reference (a) concludes that, “subject to certain requirements set out in the Initial SIA Report and the SIA Final Addendum Report, the Transmission Project is expected to have no material adverse impacts on the reliability of the integrated power system ...” In the section entitled “IESO Requirements for Connection” there are numerous requirements described.

With respect to the Initial SIA documentation, the report established requirements for IESO Requirements for Connection on the basis of the initial configuration at 69 kV, and some but not all of the requirements may still be relevant.

Question/Request:

- i. Please confirm that DWPI will fulfill the Applicant Requirements listed at reference (a) under IESO Requirements for Connection.
- ii. Referring to (a), please indicate which option DWPI has elected to avoid transformer back-feed during Orangeville breaker outages.
- iii. For each of the specific and the general requirements at reference (b):
 - o Confirm that DWPI will fulfill all of the requirements which still apply.
 - o Otherwise, if the requirements listed are not relevant for the new configuration, indicate why they are not required.

Bd. Staff Interrogatory 14: Customer Impact Assessment (CIA)**Reference:**

Exh. H/ Tab 3/ Sch. 1/ Appendix A/ p. 8/ Bullet 2

Preamble:

Hydro One Networks Inc. (“Hydro One”) issued a final CIA Report for the proposed Transmission Project on August 31, 2012, concluding that the proposed connection will not have any adverse impacts on existing Hydro One customers in the area. However, in the section Conclusions and Recommendations, Hydro One states in part that:

“These increases were within the capability of the existing Hydro One facilities. However, the customers connected in the area should review the fault levels at their connection points to confirm their equipment is capable of withstanding the increased fault and voltage levels”.

Question/Request:

Please provide evidence that the necessary confirmation has been received from affected customers.

Bd. Staff Interrogatory 15: Renewable Energy Approval (REA)**Reference:**

- a. Exh. B/Tab 1/ Sch. 1/ p.5/ §15
- b. Exh. E/Tab 2/ Sch. 1/ §2/ Renewable Energy Approval

Preamble:

In reference (a), DWPI indicated that it expects to receive a decision from the Ministry of the Environment regarding its REA in January 2013.

The Applicant filed its final REA submission package with the Ministry of the Environment on August 13, 2012 and therefore expects to receive its REA in approximately January 2013.

The pre-filed evidence at reference (b) mentions the Draft REA Submission package.

Question/Request:

- i. Please provide an update on developments in regard to the Renewable Energy Approval process, and whether or not the REA approval is still expected in January 2013. Or is DWPI anticipating significant objections and a possible “bump-up” to another forum?
- ii. Please confirm that DWPI understands that should the REA decision result in a material alteration to the route of the transmission line as proposed in this

application, any Board decision and order would be predicated on the original route and would therefore no longer be valid.

- iii. Upon completion of the environmental assessment, please file a copy of the REA approval along with a copy of the REA documentation (may be filed in electronic form).